

ABSTRACT

An improved structure of a spark plug which provides higher durability and ignitability of a gaseous fuel. The spark plug

5 consists of a center electrode, a ground electrode, a noble metal chip joined to a center electrode-opposed surface of the ground electrode by laser welding, and a fused portion that forms a weld of the noble metal chip and the ground electrode formed by materials of the ground electrode and the noble metal chip melted together. A

10 sectional area of the noble metal chip traversing a length thereof is between 0.1mm^2 and 0.6mm^2 . An unfused sectional area percentage that is a percentage of a sectional area of an unfused portion of a joined end of the noble metal chip within a range of a sectional area of the noble metal chip closest to the fused portion

15 traversing the length of the noble metal chip is less than or equal to 50%. A melt angle that is an angle which a line extending through the fused portion along a maximum depth of the fused portion makes with the center electrode-opposed surface of the ground electrode is less than or equal to 60° .

2009020-020602